

# CW-TH Series ESS

## All-in-One Storage System

CW20K-100-TH  
CW30K-100-TH  
CW40K-100-TH  
CW50K-100-TH

The CW-TH Series ESS is a All-in-One storage system for commercial business with compatible design. It works with 50kW PCS and 105kWh batteries system. It supports storing energy from diesel generator.



### Efficient

Advanced electrical technology with up to 98.2% efficiency  
All-in-one design and highly integrated

### User-friendly

Industrial design with a modern aesthetic look  
Easy to install and simple to use  
Grid-support & grid-forming

### All-in-one

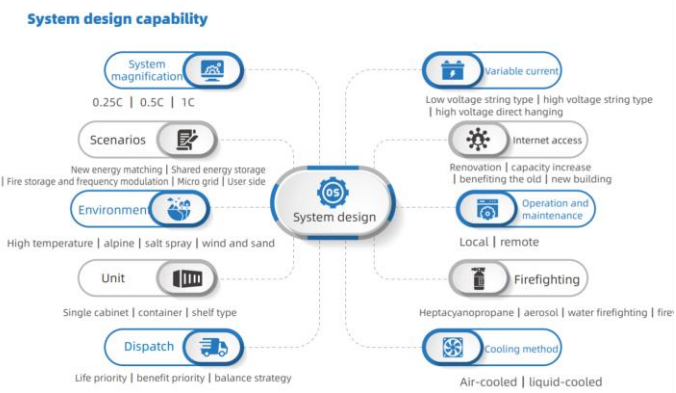
Modular design with different optional part.  
Parallel installation side-by-side or back-to-back.  
Supports storing energy from diesel generator.  
Max. 10 pcs parallel for on-grid and off-grid operation;  
Support multiple batteries parallel

### Reliable

IP55 protection degree for outside installation  
Independent design of electrical structure and battery system

### Intelligent

Exclusive Li-ion battery BMS and EMS management  
Time-slot function to save cost with peak-valley



Model	CW20K-100-TH	CW30K-100-TH	CW40K-100-TH	CW50K-100-TH
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DC Data

Battery Type	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>
Battery Energy	98.88kWh/1P30S	98.88kWh/1P30S	98.88kWh/1P30S	98.88kWh/1P30S
Battery Voltage Range	504Vdc ~ 648Vdc	504Vdc ~ 648Vdc	504Vdc ~ 648Vdc	504Vdc ~ 648Vdc
Rated Voltage	576V	576V	576V	576V
Pack	206Ah/LFP 3.2V	206Ah/LFP 3.2V	206Ah/LFP 3.2V	206Ah/LFP 3.2V
Cycle Life	≥ 6000@0.5C 25°C	≥ 6000@0.5C 25°C	≥ 6000@0.5C 25°C	≥ 6000@0.5C 25°C
Communication	RS485 / CAN	RS485 / CAN	RS485 / CAN	RS485 / CAN

PCS Parameters

Rated Output Power	20KW	30KW	40KW	50KW
Max. Rated Output Power	22KW	33KW	44KW	55KW
Rated Grid Voltage	3L / N / PE 400VAC	3L / N / PE 400VAC	3L / N / PE 400VAC	3L / N / PE 400VAC
Grid Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Output THDi	<3%	<3%	<3%	<3%
Peak Efficiency	98.2%	97.6%	97.6%	97.6%

PV String Input Data

Max. DC Input Power (W)	30000	39000	52000	65000
MPPT Voltage Range (V)	180V~960V	150V~850V	150V~850V	150V~850V
Start-up Voltage (V)	200	180	180	180
Rated DC Input Voltage (V)	600	600	600	600
No.of MPPT Trackers/ No.of String Per MPPT Tracker	2/2, 2+2	3/2+2+2	4/2+2+2+2	4/2+2+2+2

General Data

Dimensions (W x D x H)	1100x1000x2100 mm
Weight of the Whole System	1200 KG(BATT)+35KG/80KG(INVERTER)
Protection Level	IP55
Operating Temperature Range	-20°C ~ 50°C
Relative Humidity	0 ~ 95% (Non-Condensing)
Warranty	5 Years Product Warranty
Cooling	Forced Air-Cooling
Fire Protection	Aerosol Fire Protection
Certifications	EN62109, EN62477, IEC61000, VDE4105, EN50549

Commercial & Industrial  
Solution Supports Your  
Business

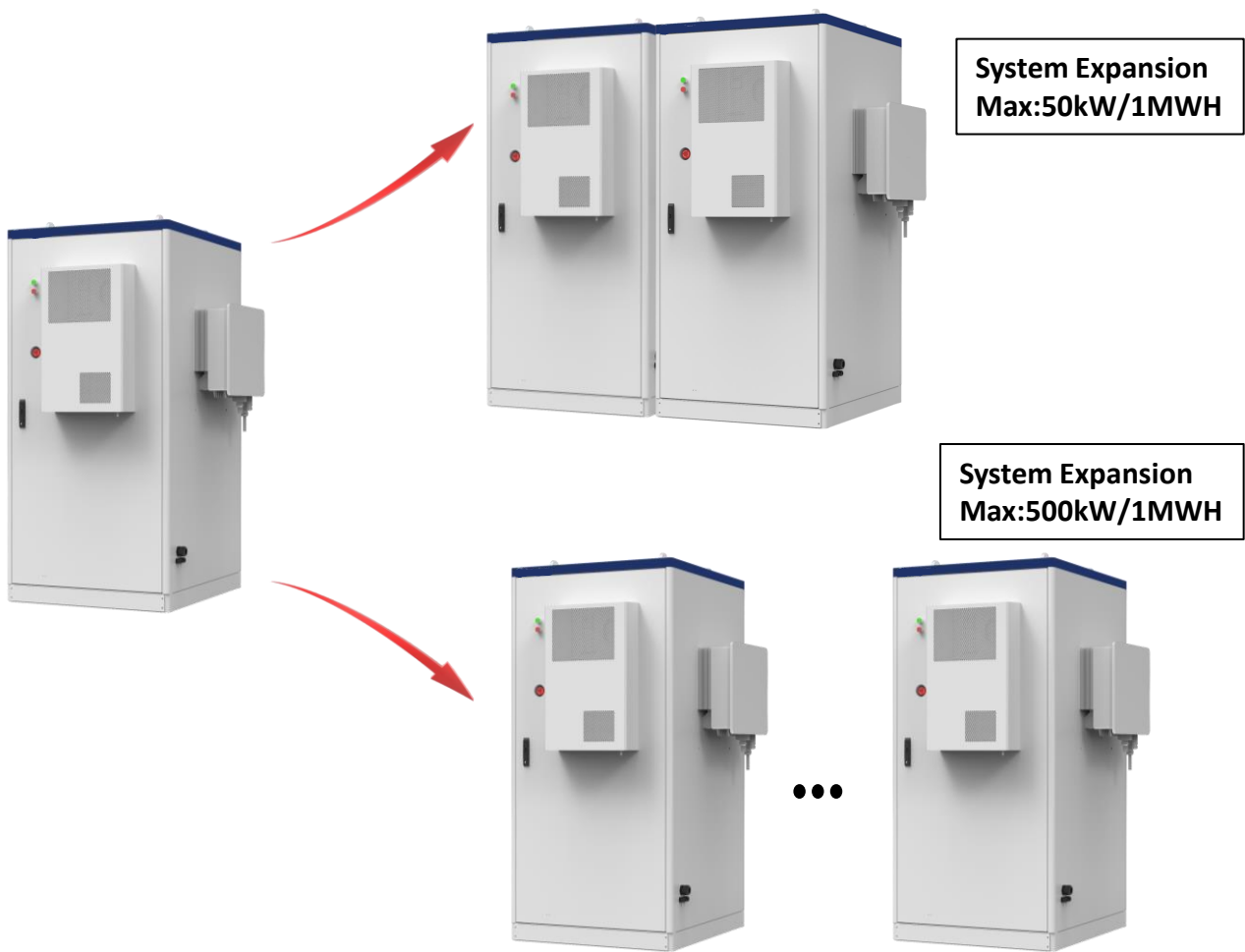
Energy Storage System



Sinexcel ESS is a world-leading energy storage solution and service provider covering the full power range.

New Life with Zero Carbon  
Empowered by Technology

Typical application cases



500kWh with 10 strings version

